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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/636,029 08/11/00 MIYASHITA

K 381NP/49131

EXAMINER

MMC2/1010
EVENSON MCKEOWN EDWARDS & LENEHAN PLLC
SUITE 700
1200 G ST NW
WASHINGTON DC 20005

AMIN, A

ART UNIT

PAPER NUMBER

2858
DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/636,029

Applicant(s)

MIYASHITA ET AL.

Examiner

Anand B Amin

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08-11-2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. *[Signature]*

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Specification

1. The specification of the disclosure is objected due to the following informalities:

a) The circuitry explained in detail is incorrect, as written. The "other resistor 201" is not connected to the gland side through the electric switch 105 as per specification.(page 11, line 9-11).

Appropriate correction is required.

b) The incomplete text. (page 11, line 27)

Abstract

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims, 1- 11, the phrase " characterized in that " renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Appropriate correction is required.

Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 1, the phrase "etc" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are rejected under 35 U.S.C 103(a) as being unpatentable over Kawakami (U.S 5,393,991) in view of Kimura (U.S. 5,999,007)

Regarding claim 1, Kawakami discloses resistors having a predetermined resistance is inserted in the supply lines so that normal operation, after the burn-in test, is not affected by the gate connections (Abstract, line 25-30).

Furthermore, R1 is a resistor inserted in the control voltage supply line 4 between the control IC 1 and a gate terminal of the power MOS-FET 2 (column 1, line 35-38, figure 5).

Kawakami is silent about the specific detail regarding the rated voltage to screen the integrated circuit.

In the same field of endeavor, however, Kimura discloses the output voltage to switch rated voltage to screen the integrated circuit.(Abstract, column 2, line 60-65). With this configuration, the predetermined high voltage which is output from the voltage regulator in the screening operation and which is higher than the normal voltage can be controlled to coincide with the target screening voltage.(column 3, line 35-40). Therefore, the specified screening voltage can be obtained with better precision.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the rated (normal) voltage switching from circuit via serial communication taught by Kimura in the system of Kawakami because of the normal burn-in voltage value achieved with good precision.

Regarding claims 2-6, Kawakami discloses other resistor is connected to voltage line has connected to voltage source which output to integrated circuit. Figure 2, schematically shows integrated circuit, control IC, 4a and 4b a voltage lines, R1 through R6a resistors.(column 5, line 20-35). Furthermore, Kawakami discloses, the resistors R1 and R2 and the control IC 1 are set such that the switching (turning on and off) speed of the normally operating (column 4, line 60-65). Moreover, Kawakami discloses also external connection terminals; reference

20 denotes an external connection terminal for the burn-in test to which a burn-in test voltage is applied from an external circuit (column 4, line 30-35).

6. Claims 7-10 are rejected under 35 U.S.C 103(a) as being unpatentable over Kawakami (U.S 5,393,991) in view of Fujimoto (U.S. 6,125,309).

Regarding claims 7 and 9, Kawakami discloses a resistor as recited in claim 6, and recognizes that the resistors R1 and R2 are set such that the switching (turning on and off) speed of the normally operating.

Kawakami is silent about the specific detail regarding the serial communication signal.

In the same field of endeavor, however, Fujimoto discloses a FIG. 5 show a flow chart showing an updating process using serial communication of engine control device(column 3, line 10-14).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use of communication signal taught by Fujimoto in the system of Kawakami because of device has no measure about writing defect occurring in such a case that a signal is stopped due to some factor, e.g., an instantaneous cut-off operation of a line (communication signal line) in the middle of an updating operation.

Regarding claims 8, Fujimoto discloses FIG. 1 and 6 show a flow chart showing a writing process using a serial communication line 2c to store an

updating process program for updating the PROM 11 (figure 1, column 3, line 45-50)

Regarding claim 10, Kawakami discloses the burn-in (screening) test includes a test conducted at a normal voltage and a test conducted at a voltage higher than the normal voltage (rated voltage)(column 4, line 65-70). Kawakami also discloses when the power MOS-FET is mounted in a bare chip state in the hybrid integrated circuit device must be process burn-in screening test may be conducted before the assembly on preliminary processed products (column 1, line 63-66 .

7. Claims 11 is rejected under 35 U.S.C 103(a) as being unpatenatable over Kawakami (Hybrid Integrated Circuit Device Having Burn-in Testing Mean, U.S 5,393,991) in view of Fujimoto (Vehicle Control Device, U.S. 6,125,309).

Regarding claim 11, Kawakami discloses the test is conducted during the assembly of the device or after the assembly thereof by simulating a normal operation (a burn-in test which uses a normal voltage) (column 1, line 67 and 1-5).

Kawakami is silent about the specific detail regarding the check the characteristic over arithmetic process and integrated circuit.

In the same field of endeavor, however, Kimura discloses ROM (Read-Only Memory) update process includes a collation in which a check is made to determine whether the updating of the ROM was correctly executed (Abstract).

Kimura further discloses an updating process means for updating a control program. An arithmetically processing a control amount according to a control program by using a microcomputer and, more particularly, to a vehicle control device in which a memory for storing a control program can be updated while being incorporated in the control device (column 1, line 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the check the characteristics using an arithmetically processing of to be mounted programmable devices of Fujimoto with respect to rated voltage to screen of integrated circuit of Kawakami because the process of Fujimoto provides Kawakami with a program is written in the memory by a only purpose machine before the control device is assembled , and the memory is directly soldered on a substrate as set forth in Kawakami

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand B Amin whose telephone number is 703-308-4931. The examiner can normally be reached on 8:00 A.m. to 4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned

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are 703-306-7722 for regular communications and 703-306-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is

703-306-3431.

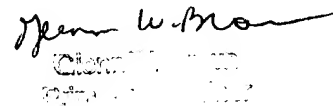


Anand B. Amin

Examiner

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September 26, 2001



James W. Moore
Director